

the finality of the rejection over European Patent Document No. EP 0 232 121 (EP '121) in view of U.S. Patent No. 4,197,371 (*Holst et al*) (See Interview Summary).

In the only remaining rejection, Claims 1-19 stand rejected under 35 U.S.C. §103(a) as being obvious over EP '121 in view of *Holst et al*. This rejection is respectfully traversed for at least the following reasons.

The present invention relates to a method of producing polysaccharide fibre. According to one aspect of the present invention as defined by Claim 1, a method of producing polysaccharide fibres includes the steps of dissolving a polysaccharide in a solvent, and spraying the solution into a bath which contains a water-miscible organic solvent and a cross-linker.

EP '121 relates to water-absorbent materials useful in medical dressings (EP '121 at col. 1, lines 3-4). EP '121 discloses (a) dissolving a carboxylate ester of a polysaccharide which is water-soluble in its unesterified state in an organic solvent, (b) extruding the resulting solution, and (c) subjecting the fibres to conditions which cause hydrolysis of the ester groups in the polysaccharide carboxylate ester and cross-linking of hydroxyl groups so

formed (EP '121 at col. 1, line 60 to col. 2, line 11). The cross-linked polysaccharide contains covalent chemical cross-links between hydroxyl groups (EP '121 at col. 1, lines 19-22).

EP '121 does not disclose or suggest each feature of the present invention. For example, EP '121 does not disclose or suggest spraying a solution formed by dissolving a polysaccharide in a solvent into a bath which contains a water-miscible organic solvent. In fact, EP '121 discloses extruding a spinning dope formed by dissolving a polysaccharide ester in an organic solvent into an aqueous medium (EP '121 at col. 3, lines 14-64). EP '121 further discloses that the aqueous medium is preferably alkali, for example it may be a solution of sodium hydroxide or potassium hydroxide (EP '121 from col. 3, line 65 to col. 4, line 1). In stark contrast, the present invention includes spraying a solution formed by dissolving a polysaccharide in a solvent into a bath which contains a water-miscible organic solvent. Certainly, the aqueous medium disclosed by EP '121 is not suggestive of the claimed bath which contains an organic solvent, let alone a water-miscible organic solvent.

Furthermore, *Holst et al* does not cure the above-described deficiency of EP '121. In this regard, the Examiner relies on *Holst et al* to demonstrate that the attachment of compounds such as polyvinylamine or Polybrene to polysaccharides is well known in the art (Official Action issued March 3, 1999, at pages 3 and 4). However, like EP '121, *Holst et al* does not disclose or suggest spraying a solution formed by dissolving a polysaccharide in a solvent into a bath which contains a water-miscible organic solvent.

In addition, one of ordinary skill in the art would not find motivation to combine EP '121 with *Holst et al* in the manner set forth in the Official Action. In this regard, EP '121 discloses that the cross-linked polysaccharide contains covalent chemical cross-links between hydroxyl groups (EP '121 at col. 1, lines 19-22). However, the polyelectrolytes of the present invention which are used as cross-linking agents, such as polyvinylamine and Polybrene, ionically cross-link the polymer (specification at page 5, lines 7-8 and page 20, lines 21-23). Thus, one of ordinary skill in the art would not find motivation to employ an ionic cross-linking agent, i.e., the polyvinylamine disclosed by *Holst et al*, to form covalent chemical cross-links, as

disclosed by EP '121. Thus, EP '121 and *Holst et al* are not properly combinable in the manner set forth in the Official Action.

Therefore, a *prima facie* case of obviousness has not been established. Accordingly, for at least the foregoing reasons, withdrawal of this §103(a) rejection is respectfully requested.

Furthermore, dependent Claims 3, 17 and 18 each recite features which are not disclosed or suggested by the applied documents. For example, according to one aspect of the present invention as set forth in Claim 3, the organic solvent is an alcohol or a ketone. EP '121 does not disclose this feature. In contrast with the present invention, EP '121 discloses that the aqueous medium in which the spinning dope is extruded is preferably alkaline, for example a solution of sodium hydroxide or potassium hydroxide (EP '121 from col. 3, line 62 to col. 4, line 1).

According to another aspect of the present invention as set forth in Claim 17, the cross-linker ionically cross-links the polysaccharide. EP '121 does not disclose or suggest this feature. In contrast with the present invention, EP '121 discloses that "the cross-linked polysaccharide contains

covalent chemical cross-links between hydroxyl groups" (EP '121 at col. 1, lines 20-22) (emphasis added).

Claim 18 is directed to a further aspect of the present invention, and recites that the solvent dissolving the polysaccharide is water. EP '121 does not disclose or suggest this feature. In fact, EP '121 discloses dissolving a carboxylate ester of a polysaccharide in an organic solvent (EP '121 from col. 1, line 63 to col. 2, line 2).

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order, and such action is earnestly solicited.



Application No. 09/101,341  
Attorney's Docket No. 000500-128

If the Examiner has any questions relating to this amendment, or the application in general, he is invited to telephone the undersigned.

Respectfully submitted,

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Date: June 13, 2000